

United States Patent [19]

Nishiumi et al.

[11] Patent Number:

5,897,437

[45] Date of Patent:

Apr. 27, 1999

1941 COMINCLER INC.	[54]	41 CC	ONTROL	LER	PACI
---------------------	------	-------	--------	-----	------

[75] Inventors: Satoshi Nishiumi; Kazuo Koshima,

both of Kyoto; Nobuyuki Nonaka,

Tokyo, all of Japan

[73] Assignee: Nintendo Co., Ltd., Kyoto, Japan

[21] Appl. No.: 08/727,239

[22] Filed: Oct. 8, 1996

[30] Foreign Application Priority Data

[56] References Cited

U.S. PATENT DOCUMENTS

5,691,898 11/1997 Rosenberrg et al. 463/38

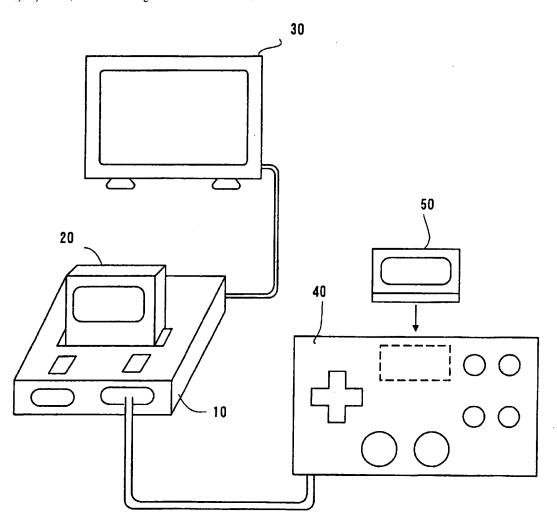
5,734,373 3/1998 Rosenberg et al. 463/38

Primary Examiner—George Manuel
Attorney, Agent, or Firm—Nixon & Vanderhye PC

[57] ABSTRACT

A controller pack includes a case and a lid detachably attached to the case, and the controller pack is detachably attached to an opening portion of a controller. A vibration source is fixed to the lid. When a specific CPU address and data are outputted from terminals, an electric power of a battery is applied to the vibration source by a driver circuit, and therefor, the vibration source generates a vibration. The vibration generated by the vibration source is conveyed from the lid to the controller, and then, to hands of a player grasping the controller.

20 Claims, 16 Drawing Sheets



09/16/2003, EAST Version: 1.04.0000